

AMENDMENTS

Amendments to the Claims

Please amend the claims according to the following listing of the claims.

Listing of the claims

1. (Currently Amended) Process for the production of primary aluminium, comprising electrolyzing ~~by the electrolysis of~~ Al_2S_3 , using in a bath of molten chloride salt in which the Al_2S_3 is dissolved, wherein the bath is substantially free from MgCl_2 molten chloride salt comprises a MgCl_2 -NaCl-KCl mixture, and wherein an additive comprising a fluoride compound is added to the bath to improve the electrical conductivity of the bath to enable an increase in the current density in the bath.
2. (Previously Presented) Process according to claim 1, wherein the additive consists essentially of the fluoride compound.
3. (Previously Presented) Process according to claim 1, wherein the additive mainly consists of the fluoride compound.
4. (Previously Presented) Process according to claim 1, wherein the fluoride compound is cryolite.
5. (Previously Presented) Process according to claim 4, wherein the concentration of the cryolite is in the range of 5 to 30 wt%.
6. (Currently Amended) Process according to claim 1, wherein ~~[[the]]~~ an effective area of an anode extending into the bath is enhanced by reducing ~~[[the]]~~ an amount and/or size of gas bubbles covering the anode.

7. (Previously Presented) Process according to claim 1, wherein the bath of molten chloride salt mainly comprises alkali metal chlorides.
8. (Currently Amended) Process according to claim 1, wherein the bath of molten chloride salt metal is substantially free of earth alkaline chlorides.
9. (Previously Presented) Process according to claim 1, wherein the electrolysis is carried out at a bath temperature of between 600°C and 850 °C.
10. (Previously Presented) Process according to claim 1, wherein the electrolysis is carried out in a multi-polar electrolysis cell.
11. (Previously Presented) Process according to claim 4, wherein the concentration of the cryolite is in the range 7 to 15 wt%.
12. (Previously Presented) Process according to claim 4, wherein the concentration of the cryolite is about 10 wt%.
13. (Previously Presented) Process according to claim 1, wherein the bath of molten chloride salt mainly comprises KCl and NaCl.
14. (Previously Presented) Process according to claim 1, wherein the electrolysis is carried out at a bath temperature of between 700 °C and 800 °C.
15. (New) Process according to claim 4, wherein the concentration of the Al_2S_3 is in the range 4 to 10 wt%.
16. (New) Process according to claim 15, wherein the concentration of the cryolite is in the range 7 to 15 wt%.
17. (New) Process according to claim 15, wherein the concentration of the cryolite is about 10 wt%.